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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/619,682	05/23/96	CALLAGHAN	F 5003/PCT/US

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SHARP COMFORT AND MERRETT  
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DALLAS TX 75240-6636

LM61/0528

EXAMINER

LEGREE, T

ART UNIT	PAPER NUMBER
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2744

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DATE MAILED: 05/28/98

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
**08/619,682**

Applicant(s)  
**CALLAGHAN et al.**

Examiner  
**Tracy M. Legree**

Group Art Unit  
**2744**



☐ Responsive to communication(s) filed on \_\_\_\_\_.

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 31-85 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 31-33, 37-44, 46, 49, 50, 53, 54, 58-65, 67, 69-71, 74-76, and 82-85 is/are rejected.

☒ Claim(s) 34-36, 45, 47, 48, 51, 52, 55-57, 66, 68, 72, 73, and 77-81 is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☒ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 4,9

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## DETAILED ACTION

### *Priority*

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. PCT/GB94/02101, filed on September 27, 1994.

### *Drawings*

2. Since allowable subject matter has been indicated, applicant is encouraged to submit formal drawings in response to this Office action. The early submission of formal drawings will permit the Office to review the drawings for acceptability and to resolve any informalities remaining therein before the application is passed to issue. This will avoid possible delays in the issue process.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 75 recites the limitation "A merchandising system" in line 1. There is insufficient antecedent basis for this limitation in the claim.

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*Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 31 and 53 are rejected under 35 U.S.C. 102(b) as being anticipated by Zook et al. (Zook), U.S. Patent No. 4,850,009.

Regarding claims 31 and 53, Zook describes a portable handset terminal comprising an optical sensor device (52) for sensing commands and/or other data and for producing input signals in response to the sensed commands and/or data (col. 3, lines 22-29; col. 6, line 58 - col. 7, line 8), a rewritable storage/memory (64) programmable with information relating to a plurality of items, user selected by the reading means (col. 6, line 32-47; see keyboard functions col. 10 - col. 15), a controller (64) connected to receive and process input signals from the sensor and arranged to respond to commands to control the hand held unit and to data select and item (col. 2, lines 45-48; col. 3, lines 12-17 and lines 32-36; col. 6, lines 32-34; col. 9, line 21-col. 15, line 23), a display (54) for displaying user readable representation of the commands and stored information for an item (col. 6, lines 22-26; col. 15, lines 51-52, see keyboard functions col. 10 - col.15) and a telecommunications interface (68, 66) for telephonic transmission of information relating to a selected item or items from the storage to a remote processing center via a

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telecommunications network and for telephonic reception of information relating selectable items from the remote processing center to the storage via the telecommunications network, the controller being responsive to commands to cause downloading of information for the remote processing center as required for updating information previously stored in the rewritable storage for selectable items (col. 2, lines 48-59; col. 4, lines 29-34; col. 6, lines 36-51; col. 7, lines 9-37).

Regarding claim 32, Zook describes a telecommunications interface (68) which is integral to the hand held unit and directly connects the hand held unit to the telecommunication network. (col. 6, lines 39-51; col. 7, line 9-37; Figure 6)

Regarding claims 33 and 54, Zook describes a rechargeable power source (55) means being provided for recharging the power source. (col. 3, line 64 - col. 4, line 5; col. 6, lines 51-55)

Regarding claims 37 and 58, Zook describes an RF transceiver arrangement including an RF modem (66) for real time data transmission and reception of RF signals. (col. 3, lines 12-18; col. 4, lines 6-13; col. 6, lines 36-39)

Regarding claims 38 and 59, Zook describes using arrow keys for manually scrolling the display in a first and/or second direction for selectively displaying information for respective selectable or selected items from storage. (Figure 10; see keyboard functions col. 10 - col. 15)

Regarding claims 39 and 60, Zook describes operation of switches (keys) in predetermined operational states of the hand held unit which causes functions other than scrolling functions to be performed. (Figure 10; see keyboard functions col. 10 - col. 15)

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Regarding claims 41 and 62; Zook describes an optical sensor for reading coded data such as a bar code, which is electronically interpreted by the microprocessor control decoder. Inherently, the controller access the stored information for the selectable items to determine the natural language characters corresponding to the coded data for display. (col. 6, line 58 - col. 7, line 8; col. 10, lines 33-36; see keyboard function for drug charts col. 15)

Regarding claims 42 and 63, Zook describes a using the optical sensor such as a bar code reader to read bar code data. (col. 3, lines 22-29; col. 6, line 58 - col. 7, line 8)

Regarding claims 49 and 70, Zook describes updating programs in the hand held unit remotely from the processing center. (col. 4, lines 6-13; col. 10, lines 9-20)

Regarding claims 50 and 71, Zook describes ID badges comprising verification bar codes for verification of the user's identity. (col. 9, lines 33-41; col. 10, lines 33-36)

Regarding claims 76 and 82, Zook describes a unitary assembly for a hand held device comprising an optical sensor device (52) for sensing commands and/or other data and for producing input signals in response to the sensed commands and/or data (col. 3, lines 22-29; col. 6, line 58 - col. 7, line 8), a controller (64) connected to receive and process input signals from the sensor and arranged to respond to commands to control the hand held unit and to data select and item (col. 2, lines 45-48; col. 3, lines 12-17 and lines 32-36; col. 6, lines 32-34; col. 9, line 21-col. 15, line 23; Figure 4) and a display (54) for displaying user readable representation of the commands and stored information for an item (col. 6, lines 22-26; col. 15, lines 51-52, see keyboard functions col. 10 - col.15).

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Regarding claims 83-85, Zook describes a portable hand held device comprising A reading sensor (52) for sensing commands and/or other data and for producing input signals in response to the sensed commands and/or data, a rewritable storage (64) programmable with information relating to a plurality of items, user selected by the reading means and a display (54). The hand held device uses the reading sensor to sense identification data and commands associated with items for user selection and produces an input signal. The input signal is processed to allows access to the stored information and to generate on a display user representation of commands and the stored information. The hand held device is capable of transmitting the stored information via a communications interface to a remote processing center.(col. 6, line 14 - col. 7, line 8; col. 9, line 33 - col. 15, line 22)

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 43 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zook et al. (Zook), U.S. Patent No. 4,850,009.

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Regarding claims 43 and 64 Zook describes a self scanning optical bar code reader which functions to take a electronic digital picture. (col. 3, lines 22-29; col. 6, line 58 - col. 7, line 8)

Zook does not describe using a camera as the reading sensor.

It would have been obvious to one of ordinary skill in the art that the self scanning optical bar cod reader functions as a camera since Zook describes the optical bar code reader functioning to take electronic digital pictures.

9. Claims 40 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zook et al. as applied to claims 31 and 53 above, and further in view of Gombrich, U.S. Patent No. 4,916,441.

Zook is described above.

Zook does not describe a portable hand held terminal comprising a touch sensitive screen.

Regarding claims 40 and 61, Gombrich is evidence for a portable hand held terminal comprising a touch sensitive display (22d) and a controller (22a) being arranged to display a menu of user selectable items and to be responsive to a location at which the screen is touched for input of user selections from the menu. (col. 5, lines 34-43; col. 8, 51-61; col. 11, lines 5-39)

It would have been obvious to one of ordinary skill in the art to improve Zook et al. with a touch sensitive display means as evidenced by Gombrich to allow the user to access more detailed information in a more orderly manner using menus, since the keys of the keypad would



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not be limited in the functions they perform. The use of a touch sensitive screen facilitates simple, easy data entry by minimizing the amount of free text entry needed.

10. Claims 44, 46, 65 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zook et al. as applied to claims 31 and 53 above, and further in view of Roberts , U.S. Patent No. 5,324,922 and Biss, EPO 0 536 481 A2.

Zook is described above.

Zook does not describe a user programmable controller which is programmable to cause the captured data to be displayed on the display either in a first orientation suitable for reading displayed data when the hand held unit is held in the user's right hand or in a second orientation suitable for reading displayed data when the hand held unit is held in the user's left hand. Zook further does not describe that the hand held unit is configured as an elongated unit such that it may be held by a user in the manner of a pen or quill with the reading sensor being located in the reading head or adjacent to one end of the hand held unit.

Regarding claims 44, 46, 65 and 67, Roberts describe a transaction terminal comprising a bar code reader with wand (21) which communicates with remote host computer for processing merchandise orders.

Regarding claims, 44, 46, 65 and 67, Biss is evidence for a hand held bar code reader device much like a pen with a display that can be programmed to accommodate a right handed person or a left handed person.(col. 6, lines 5-34; Figure 3) The pen like hand held reading

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device includes a bar code scanner at the lower end thereof . (col. 4, lines 40-42; Figures 1A & 1B)

It would have been obvious to one of ordinary skill in the art to that Zook could be used to process merchandising orders as evidenced by Roberts, since Zook comprises a rewritable storage/memory programmable with any type of information

It would have been obvious to one of ordinary skill in the art to configure Roberts so as to accommodate both right handed and left handed persons as evidenced by Biss to increase the speed an accuracy at which the user is able to perform task. It would have been obvious to one of ordinary skill in the art to configure Roberts in a portable pen like device as evidenced by Biss, to reduce the size of the apparatus and give the user the freedom to work at different locations

11. Claims 48,69, 74 and 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zook et al. as applied to claims 51 and 83 above, and further in view of Roberts, U.S. Patent No. 5,324,922.

Zook is described above.

Zook does not describe means for displaying a plurality of selectable items with associated data sources for user selection of an item by operation of the hand held unit and a remote processing center for processing the user selections transmitted from the hand held unit. Zook does not describe a hand held portable device for use in a merchandising system.

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Regarding claims 48, 69, 74 and 75, Roberts is evidence for a hand held device used in merchandising wherein the selectable items for input to the hand held device are merchandising items. The items and their bar codes are displayed on a visual medium such as a sheet of paper. The user selects the item to be purchased by scanning the bar code on the visual medium. A remote processing center initiates processing of user orders of the selectable items.(col. 2, lines 46-62; col. 8, line 25 - col. 11, line 9)

It would have been obvious to one of ordinary skill in the art to that Zook could be used to process merchandising orders as evidenced by Roberts, since Zook comprising a rewritable storage/memory programmable with any type of information.

#### *Allowable Subject Matter*

12. Claims 34-36, 45, 47, 51,52, 55-57, 66, 68, 72,73, and 77-81 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### *Conclusion*

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hanson	U.S. Patent No. 5,541,398	07/30/96
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Ruppert et al.	U.S. Patent No. 5,424,524	06/13/95
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Kumar et al. U.S. Patent No. 5,371,348 12/06/94

See et al. U.S. Patent No. 4,279,021 07/14/81

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tracy M. Legree whose telephone number is (703) 305-3859. The examiner can normally be reached on Monday-Thursday from 7:30 am to 5:00 pm. The examiner can also be reached on alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost, can be reached on (703) 305-4778.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703)308-9051, (for formal communication intended for entry)

**Or:**


(703)305-9508, (for informal or draft communications, please label "PROPOSED" or "DRAFT")

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive Arlington, VA., Sixth Floor (Receptionist).

Tracy M. Legree   
May 24, 1998

  
**DWAYNE D. BOST**  
**SUPERVISORY PATENT EXAMINER**  
**GROUP 2700**